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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,490

12/09/2003

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EXAMINER

LEE, JOHN J

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,490	<b>Applicant(s)</b> RIBEIRO ET AL.	
	<b>Examiner</b> JOHN J. LEE	<b>Art Unit</b> 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments/Amendment*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Finke-Anlauff (US 6,580,932) in view of Robbin et al. (US 2003/0095096).

Regarding **claim 1**, Finke-Anlauff discloses that a handheld wireless communication apparatus (Fig. 1). Finke-Anlauff teaches that a first input device (19 in Fig. 5) carried on said housing (Fig. 5) (Fig. 2 and column 2, lines 6 - 39, where teaches mobile phone has a housing including first input device (Keys)). Finke-Anlauff teaches that a motion pad or action pad (rotary shape) input device (Fig. 5) carried on said housing (6 In Fig. 5) and adjacent to said first input device (Fig. 5 and column 2, lines 40 - column 3, lines 14, where teaches mobile phone has a housing including a rotary shape action pad input device carried on the housing and adjacent to the first input device). Finke-Anlauff teaches that a second input device (6 in Fig. 5 or 12 in Fig. 2) carried on said housing (Fig. 2, 5) (Fig. 5 and column 2, lines 40 - column 3, lines 14, where teaches

mobile phone has a housing including a second input devices carried on the housing).

Finke-Anlauff teaches that a display (4 in Fig. 2) carried on said housing substantially in-between said motion pad or action pad (rotary shape) device (Fig. 5) and said second input device (6 in Fig. 5 or 12 in Fig. 2) (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing including a display device located between the rotary shape motion pad or action pad device and second input device). Finke-Anlauff teaches that a speaker (the mobile telephone inherently has a speaker located next to input devices (keys) carried on the housing) carried in said housing adjacent to said second input device (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing inherently including speaker (the Fig. 2, 5 does not show the speaker but it inherently has a speaker right next input keys) located adjacent to the input devices).

Finke-Anlauff does not specifically disclose the limitation “a rotary input device carried on said housing and adjacent to and encircling said first input device and speaker carried on housing”. However, Robbin discloses the limitation “a rotary input device carried on said housing and adjacent to and encircling said first input device and speaker carried on housing” (Fig. 1B, 2A and pages 3, paragraphs 35 – pages 4, paragraphs 42, where teaches the housing having a rotary input device located adjacent to the encircling the input device and housing also having speaker adjacent to the input devices). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Finke-Anlauff structure as taught by Robbin, provide the motivation

to achieve an enhancing mechanical function of wireless handheld device for providing user's convenient in the wireless communication device.

Regarding **claim 2**, Finke-Anlauff discloses that the housing is an elongated housing, having a long dimension and a short dimension (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has the housing is elongated housing, having a long and short dimension).

Regarding **claim 3**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff further discloses that the rotary shape input device, said display, and said second input device are aligned substantially linearly along said long dimension of said elongated housing (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing having a long dimension that the rotary shape input device, said display, and said second input device are aligned substantially linearly).

Regarding **claim 4**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff further discloses that the rotary shape input device, said display, and said second input device are aligned substantially linearly (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing having a long dimension that the rotary shape input device, said display, and said second input device are aligned substantially linearly).

Regarding **claim 5**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff further discloses that the display is adjacent to said rotary shape input device and adjacent to said second input device such

that said display is arranged substantially in-between said rotary input device and said input device (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing having a display device located between the rotary shape input device and the input device).

Regarding **claim 6**, Finke-Anlauff discloses that the first input device is a keypad (Fig. 1, 2 and column 2, lines 6 - column 3, lines 14, where teaches the first input device is keypad for number buttons).

Regarding **claim 7**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff further discloses that the keypad includes a plurality of keys (Fig. 1, 2), wherein an outer set of keys of said plurality of keys include an outer edge such that at least a portion of a perimeter of said keypad is in the shape of a circle (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches the first input device motion pad that a portion of a perimeter of the keypad in the shape of a circle).

Regarding **claim 8**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. However, Finke-Anlauff does not specifically disclose the limitation “the rotary input device encompasses the plurality of keys, such that said set of the keys are adjacent to the rotary input device”. However, Robbin discloses the limitation “the rotary input device encompasses the plurality of keys, such that said set of the keys are adjacent to the rotary input device” (Fig. 1B, 3 and pages 3, paragraphs 35 – pages 4, paragraphs 38, where teaches the rotary input device encompasses the plurality of keys that set of keys are adjacent to the rotary input device). It would have been

obvious to one having ordinary skill in the art at the time the invention was made to modify the Finke-Anlauff structure as taught by Robbin, provide the motivation to achieve an enhancing mechanical function of wireless handheld device for providing user's convenient in the wireless communication device.

Regarding **claims 9, 10, and 11**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. However, Finke-Anlauff does not specifically disclose the limitation "the rotary input device, that is a circular capacitive sensor, rotates around the keypad, and second input device includes an audio passage coupled to the speaker". However, Robbin discloses the limitation "the rotary input device, that is a circular capacitive sensor, rotates around the keypad, and second input device includes an audio passage coupled to the speaker" (Fig. 1B, 2 and pages 3, paragraphs 35 – pages 4, paragraphs 42, where teaches the rotary input device, a circular capacitive sensor, rotates around the keypad, and input keys includes an audio passage coupled to the speaker). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Finke-Anlauff structure as taught by Robbin, provide the motivation to enhance mechanical structure of wireless handheld device for providing user's convenient in the wireless communication device.

Regarding **claims 12, 13, and 14**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff discloses that the speaker is disposed in the second input device, and the input device is a multidirectional input device and navigation input device (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches speaker (does not teach but it is inherently the mobile telephone has

speaker is disposed in the housing adjacent to the input device) disposed in the housing, and the input keys are a multidirectional input device and navigation input device).

Regarding **claim 15**, Finke-Anlauff discloses that a microphone disposed in said housing (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches the mobile telephone housing inherently has a microphone interface).

Regarding **claim 16**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff discloses that the microphone is disposed at an end of said housing distal from said speaker (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches the mobile telephone housing inherently has a microphone interface disposed in the housing).

Regarding **claim 17**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claim 1. Furthermore, Finke-Anlauff discloses that the microphone is disposed in said housing substantially adjacent to said keypad (Fig. 2, 5 and column 2, lines 6 - column 3, lines 14, where teaches the mobile telephone housing inherently has a microphone interface disposed in the housing).

Regarding **claim 18**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 3. Furthermore, Finke-Anlauff further discloses that arranged horizontally, wherein information on said display, said first input device and said second input device are in a horizontal information orientation (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing having a short dimension that arranged horizontally, information on the display, the first input keys and the second input keys are aligned substantially horizontally).



Regarding **claim 19**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 3. Furthermore, Finke-Anlauff further discloses that information on said display, said first input device and said second input device are in a vertical information orientation (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches mobile phone has a housing having a long dimension that the vertical information orientation, the display, and the first and second input device are aligned substantially linearly along).

Regarding **claim 20**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 18. Furthermore, Finke-Anlauff further discloses that an audio passage carried on said housing adjacent to said second input device (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches inherently mobile phone has a housing including audio passage coupled to speaker that usually located adjacent to the input keys). Finke-Anlauff teaches that a speaker carried in said housing and acoustically coupled to said audio passage (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches inherently mobile phone has a housing including audio passage coupled to speaker that usually located adjacent to the input keys).

Regarding **claim 21**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 3.

Regarding **claim 22**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 15.

Regarding **claim 23**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 20.

Regarding **claim 24**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 18 and 20.

Regarding **claim 25**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 18 and 20. Furthermore, Finke-Anlauff further discloses that at least one button is readable in said horizontal configuration and said at least one button is readable in said vertical configuration (Fig. 2, 3 and column 2, lines 6 - column 3, lines 14, where teaches the display may be provided readable in horizontal configuration and readable in vertical configuration by a manual button operated by the user).

Regarding **claim 26**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 12 and 20.

Regarding **claim 27**, Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 18 and 20.

Regarding **claim 28** Finke-Anlauff and Robbin disclose all the limitation, as discussed in claims 1 and 20. Furthermore, Finke-Anlauff further discloses that controller (16 in Fig. 4) carried in said housing (Fig. 2), said controller coupled to said transceiver (Fig. 4 or inherently mobile phone has controller coupled transceiver, well known art) (Fig. 4 and column 2, lines 6 - column 3, lines 14). Finke-Anlauff teaches that a multi-key keypad carried on said front surface of said elongated housing adjacent said first end of said housing (Fig. 2 and column 2, lines 6 - column 3, lines 14, where teaches the mobile telephone having a multi-key keypad on the front surface of the housing). Finke-Anlauff teaches that multi-key keypad coupled to said controller (Fig. 4 and column 2, lines 6 - column 3, lines 14, where teaches the multi-key keypad coupled to the controller

for operation). Finke-Anlauff teaches that a speaker navigation (audio line) input located at the speaker port, the speaker navigation input coupled to the controller (Fig. 2 and column 2, lines 6 - column 3, lines 14, this is well known art, inherently, mobile phone has same structure).

Finke-Anlauff does not specifically disclose the limitation "the rotating input coupled to said controller". However, Robbin discloses the limitation "the rotating input coupled to said controller" (Fig. 1B, 2A and pages 3, paragraphs 35 – pages 4, paragraphs 42, where teaches the housing having a rotary input device, that coupled to the processor, located adjacent to the encircling the input device and housing also having speaker adjacent to the input devices). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Finke-Anlauff structure as taught by Robbin, provide the motivation to enhance controlling input device for user's convenient in the wireless communication device.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kimmo et al. (US 2001/0003816) discloses User Interface.

Hiltunen (US 2006/0152382) discloses Method and Mobile Device for Non-Visually Signaling the State of a Mobile Device.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Art Unit: 2684

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
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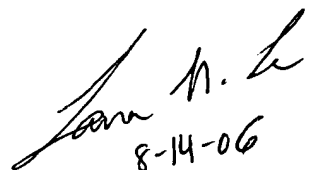
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Hand-delivered responses should be brought to USPTO Headquarters,  
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Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**.  
He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00  
pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor,  
**Edward Urban**, can be reached on **(571) 272-7899**. Any inquiry of a general nature or  
relating to the status of this application should be directed to the Group receptionist  
whose telephone number is (703) 305-4700.

J.L  
August 9, 2006

John J Lee

  
8-14-06  
LANA LE  
PRIMARY EXAMINER